

REMARKS/ARGUMENTS

Favorable consideration of this application, as presently amended and in light of the following discussion, is respectfully requested.

Claims 53-81 are pending, with Claim 59 amended by the present amendment.

In the Official Action, the following claims were rejected under 35 U.S.C. §102(b) as being anticipated by Forler et al. (U.S. Patent 5,327,176, hereinafter Forler); 53, 61, 65, 71, 79-81, 54, 62, 72, 55, 63, 73, 56, 74; Claims 57-60 were rejected under 35 U.S.C. §103(a) as being unpatentable over Forler in view of Safadi, U.S. Patent 6,487,721.

Applicant requests acknowledgement of the Information Disclosure Statement (IDS) of July 25, 2002 and July 7, 2004.

Claim 59 is amended to more clearly describe and distinctly claim Applicants' invention. Support for this amendment is found in Applicants' originally filed specification. No new matter is added.

By way of background, Forler describes a system for processing audio and video components of a television signal so as to provide for automatic control of closed captioned signal display in response to the status of an audio muting feature. The system includes an operating mode in which enabling audio muting also enables the closed captioned display and disabling muting disables generation of a closed caption display.¹ Safadi describes a system for inserting commercials into an audio/visual bit stream by providing queue commands in response to queue tones in a preexisting analog signal, and/or in response to control signals from an uplink site or head end. A digital encoder generates spliceable bit streams and generation of queue commands. This enables commercial insertion at an uplink site as well as at a cable television head end. The queue commands are preferably carried in the transport

¹ Forler, Abstract.

layer of a bit stream so there is no need to decode and process several layers of the bit stream.²

In particular, Forler describes a client device that mutes by breaking the connection to the audio output. Audio signal processing channel 150 processes audio component AUDIO IN to produce a signal AUDIO. An audio mute function is provided by an audio switch 160 which operates in response to a signal MUTE. During the normal audio reproduction mode of operation, signal MUTE is at the logic 0 level causing switch 160 to couple signal AUDIO to an audio output in order to produce an audio output signal AUDIO OUT. When the audio muting function is enabled, signal MUTE is caused to be at the logic 1 level and switch 160 is, as a result, caused to decouple signal AUDIO from the audio output and to couple signal ground to the audio output instead. This prevents an audio response from being produced.³

In contrast, Claim 53 recites, *inter alia*, implementing the client requested presentation action (such as muting) including reducing the data rate of the first data stream or eliminating the transmission of the first data stream to the client device. On the other hand, Forler implements muting by simply disconnecting the audio output of the client device; the stream providing the audio is not manipulated. Forler does not address implementation of muting at the stream server. Forler does not teach or suggest reducing or eliminating transmission of the data stream to the client device to provide muting. Neither does Safadi (nor is Safadi relied upon in this regard).

Claim 53 further recites “determining an amount that a data rate of a second data stream including data of a second type maybe increased as a result of an effect on transmission bandwidth corresponding to the reduction in the data rate of the first data stream or the elimination of the first data stream.” Forler does not teach or suggest determining an amount that a data rate of a second data stream may be increased. Forler merely teaches that

² Safadi, Abstract.

³ Forler, Col. 2, line 65 - Col. 3, line 11, emphasis added

closed captioning is toggled on or off when audio is disabled or enabled, respectively. That is, Forler describes "To enable and disable the "closed caption with audio" mode of operation, decode and control unit 140 toggles the present state of signal CCEN in a manner similar to that described with respect to control signal MUTE. Decode and control unit 140 also controls both of signals CCEN and MUTE together in order to provide a new mode of operation referred to as the "closed caption with mute" mode in which the closed captioning function is automatically enabled and disabled in response to enabling and disabling, respectively, the muting function.⁴ A summary of differences between the claimed invention and Forler follows:

Claim 53	Forler
Determine an amount that a data rate of a second data stream may be increased	No determination of amount of increase in data rate of close captioning; simply toggle close captioning on or off
As a result of an effect on transmission bandwidth corresponding to the reduction/elimination in the data rate of the first data stream	No determination of amount of increase in data rate of close captioning that can result from reducing/eliminating the audio stream; simply toggle close captioning on or off
Reducing/eliminating the data rate of the first data stream from the server to the client device	Disconnecting the audio input of the client device from the audio output of the client device

Claim 79 is distinct over Forler and/or Safadi for at least these same reasons presented above relative to Claim 53.

Claim 61 recites, *inter alia*, "receiving an indication of a client requested presentation action that involves reducing a data rate of a first data stream being sent from the stream server to the client device or eliminating the transmission of the first data stream to the client device." Forler does not address implementation of muting at the stream server by reducing or eliminating a data rate of a data stream being sent from the stream server to the client device. Neither does Safadi (nor is Safadi relied upon in this regard). Claim 61 further

⁴ Forler, Col. 3, line 45 - Col. 4, line 23, emphasis added

recites “determining whether a third data stream may be streamed as a result of an effect on transmission bandwidth corresponding to the reduction in the data rate of the first data stream or the elimination of the first data stream.” Neither Forler nor Safadi teach determining whether a third data stream may be streamed as a result of an effect on transmission bandwidth. No determination based upon resulting bandwidth effects is taught in either of these references. Rather, the closed captioning function is automatically enabled and disabled in response to enabling and disabling, respectively, the muting function. Also, no determination of whether a third stream may be streamed is taught in either of these references. A summary of differences between the claimed invention and Forler follows:

Claim 61	Forler
Determining whether a third data stream may be streamed from a stream server to a client device	No determination of whether close captioning may be <u>streamed</u> from server to the client device; simply toggle close captioning on or off
As a result of an effect on transmission bandwidth corresponding to the reduction in the data rate of the first data stream or the elimination of the first data stream.	No determination of <u>whether close captioning may be streamed from server to client as a result of reducing/eliminating the audio stream</u> ; simply toggle close captioning on or off
Reducing/eliminating the data rate of the first data stream from the server to the client device	Disconnecting the audio input of the client device from the audio output of the client device

Claim 80 is distinct over Forler/Safadi for at least the same reasons presented above relative to Claim 61.

Claim 65 recites, *inter alia*, determining an amount that a data rate of a second data stream should be reduced as a result of an effect on transmission bandwidth corresponding to the increase in the data rate of a first data stream. Forler provides no such teaching of these various aspects (see remarks for Claim 61). A summary of differences between the claimed invention and Forler follows:

Claim 65	Forler
Increasing the data rate of a first stream to the client device	Teaches toggling close captioning on or off; no teaching of increasing the stream data rate of close captioning
Determining <u>an amount</u> that <u>a data rate</u> of a second data stream should be reduced	Toggle close captioning on or off according to mute state; no determination of how much audio data rate should be reduced
as a result of an effect on transmission bandwidth corresponding to the increase in the data rate of a first data stream	no determination how much data rate of audio should be reduced as a result of providing close captioning

Claim 81 is distinct over Forler/Safadi for at least the same reasons presented above relative to Claim 65.

Claim 71 recites, *inter alia*, stream server logic to determine an amount that a rate of a second data stream having a second type should be changed as a result of bandwidth effects of the changed rate for the first data stream. Claim 71 is distinguished over Forler, alone or in combination with Safadi, for at least the reasons provided for claims 53, 61, and 65.

Claim 56 recites, *inter alia*, “determining an amount of bandwidth that is freed up by reducing the data rate of the first data stream or eliminating the first data stream.” No such determination is taught by Forler (or Safadi). Claim 74 recites similar limitations and thus distinguishes over the applied references for at least the same reasons as Claim 56,

Claim 58 is distinguished over the cited references for at least the reasons cited for base Claim 53. Claim 58 further recites, *inter alia*, “including both said first and second data streams in different Single Program Transport Streams.” Combining the teachings of Forler with Safadi would produce something far different than the claimed material, at least because Forler deals with mute/close caption control for a single program stream, without knowledge or effect on close captioning for other program streams. There is simply no suggestion in Forler, for example, of muting of audio for a first program stream (e.g. a first program) and thus affecting the data rate of close captioning for a second program stream (provided to and possibly tuned by a second client device – see Claims 60, 64, 69, and 78). Forler simply does

not contemplate actions of the client device affecting other program streams in this way, and is thus entirely unsuitable for combination with Safadi to produce the material of claim 58. A summary of differences between the claimed invention and Forler and Safadi follows:

Claim 58	Forler	Safadi
Reducing/eliminating a data rate of a first data stream being sent from the stream server to the client device	Toggling close captioning for a program according to whether audio for the program is muted; toggling is accomplished by disconnecting client input from client output (e.g. toggling occurs at the client, not at the stream server).	Teaches combining single program streams into a multiple program stream.
determining an amount that a data rate of a second data stream including data of a second type may be increased as a result	No teaching or suggestion of muting a program stream by the client affecting close captioning for a different program stream than the one that was muted.	Combining with Forler results in a system wherein muting a program stream at the client device results in close captioning being enabled for that program stream at the client device, but has no effect on other program streams of the multi-program stream.
including both said first and second data streams in different Single Program Transport Streams		

Claims 68 and 76 are distinct over the cited references for at least these same reasons as presented relative to Claim 58.

Claim 59 is distinguished over the cited references for at least the reasons cited for base claim 53. Claim 59 further recites “providing a stream of packets as part of a packet flow to a modified multiplexing device, the multiplexer filtering the stream of packets to reduce or eliminate the data rate of the first data stream.” Safadi teaches the multiplexer performing ad insertion in MPEG packet streams (e.g. digital ad insertion at cue command locations in the packet stream). Using a multiplexer for digital ad insertion is not the same thing as using a multiplexer to filter a stream of packets to reduce or eliminate the data rate of the stream. In particular, Safadi describes “The MPTS is provided to the inserter(s) 140 when it is desired to insert either commercials and/or cue commands in accordance with the present invention....The inserter, in turn, determines whether to insert a commercial or pass

the MPTS through intact (e.g., unchanged). The inserter's decision is based on the presence of the cue command (or lack thereof)... Rate adaptation, as described, may take place in advance of the commercial, and as such may be facilitated as an off-line, non-real time process.⁵

Safadi further describes rate adaptation for commercial content, whereby the commercial content is adjusted to have the same data rate as the program packet stream before insertion therein. Again, this is not the same thing as using the multiplexer (e.g. inserter) to filter a stream of packets to reduce or eliminate the data rate of the stream. Rather, rate adaptation as described in Safadi refers to adapting the rate of commercial content to be the same data rate as the packet stream into which it will be inserted. A summary of differences between the claimed invention and Safadi follows:

Claim 59	Safadi
the act of reducing the data rate of the first data stream or eliminating the transmission of the first data stream to the client device includes	No teaching of the multiplexer (inserter) filtering the stream of packets to reduce or eliminate the data rate of the data stream.
a multiplexer filtering the stream of packets to reduce or eliminate the data rate of the first data stream	Instead, teaches ad insertion at cue positions in the packet stream, and rate adaptation of the inserted ad content to the data rate of the program (packet) stream.

Furthermore, filtering to eliminate the audio at the multiplexer (upstream from the client device) as recited in Claim 59 removes any motivation to apply Forler. That is, one must question why disconnect the audio input and output at the client, when the audio stream has already been eliminated upstream via the multiplexer. For at least this reason, the applied combination is improper. Claims 70 and 77 are distinguished over the cited references for at least the same reasons as presented relative to Claim 59.

⁵ Safadi, Col. 4, lines 45-67, and Safadi, Col. 5, lines 30-50

Regarding claims 60, 64, 69, and 78, Forler simply does not contemplate that the second stream (e.g. close captioning information) would be rate adjusted and provided to another client device, according to muting of the audio stream at the client device. Safadi also provides no teaching or suggestion of such a thing.

MPEP §706.02(j) notes that to establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. Also, the teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art and not based on applicant's disclosure. *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991). Without addressing the first two prongs of the test of obviousness, Applicants submit that the Official Action does not present a *prima facie* case of obviousness because both Forler and Safadi fail to disclose all the features of Applicants' claimed invention.

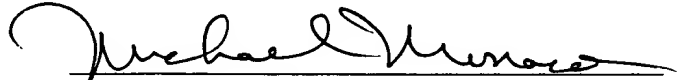
Furthermore, Applicants submit there is no teaching, suggestion, or motivation, either explicitly or implicitly, in either reference to combine the closed captioning of Forler with the commercial insertions of Safadi to arrive at Applicants' claimed invention. Thus, Applicants submit it is only through an impermissible hindsight reconstruction of Applicants' invention that the rejections can be understood.⁶

⁶ MPEP § 2143.01 "Obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either explicitly or implicitly in the references themselves or in the knowledge of one of ordinary skill in the art."

Accordingly, in view of the present amendment and in light of the previous discussion, Applicants respectfully submit that the present application is in condition for allowance and respectfully request an early and favorable action to that effect.

Respectfully submitted,

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